

AMENDMENTS TO THE DRAWINGS

Replacement drawings for Figures 9 and 10 are submitted herewith that contain a legend indicating that the figures represent prior art as required by the Examiner.

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REMARKS

Amendments to the Drawings

The Examiner objected to the drawings under M.P.E.P. § 608.02(g), 37 C.F.R. 1.84(c), and 37 C.F.R. 1.121(d) and requested that Figures 9 and 10 be replaced with sheets containing a legend indicating that the illustrated objects are old and considered prior art.

Replacement drawings in compliance with the rules noted above are submitted herewith.

Status of the Claims

Claims 1 and 2 are pending and both stand rejected. Claims 1 and 2 have been amended to correct minor grammatical errors.

Rejections Under 35 U.S.C. § 102(b)

Claims 1 and 2 were rejected under 35 U.S.C. § 102(b) as being anticipated by Collette et al. (U.S. 5,520,877). The Examiner asserted that Claim 2 is anticipated by Collette et al. on the basis that this reference teaches a method for making a biaxially-oriented container by blow molding a preform to a size larger than the final product size using a stretch rod, heat shrinking the intermediate product, and blow molding the intermediate product to form a final product. The stretch (or centering) rod (208 or 208') is used to facilitate the drawing of the preform down into the first mold. The Examiner asserted that Collette et al. teaches that "the stretch rod be released by an internal spring, therefore making the bottom unrestrained before heat shrinking the intermediate product" (citing Figure 11 and Col. 10, lines 29-54). The Examiner also asserted that while Collette et al. do not specifically disclose X-ray diffraction values recited as a limitation in Claim 1, it would be inherent that an article made of the same material in the same way would have the same properties.

Applicants respectfully traverse the Examiner's rejection of Claims 1 and 2 for several reasons: (1) the manufacturing process is different; and (2) and because the manufacturing

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process is different, the resulting product does not have the same properties even though it is made of the same material.

Collette et al. discloses a method of making a polyester container having an enhanced level of crystallinity in the sidewall while maintaining a low level of crystallinity in a thickened base portion. The sidewall portion of the preform is expanded, heated to contract and crystallize the sidewall, and then re-expanded. The base-forming portion is shielded from the heat treatment and is expanded before or after the heat treatment step.

The Examiner's interpretation of the manufacturing process disclosed by Collette et al. is inconsistent with the description and several figures provided in this reference. Figure 5 of Collette et al., for example, illustrates the first expansion step performed in the first mold unit 214 (corresponding to the primary orientation blow molding in the primary mold 13 of the present invention), and Figure 6 shows the heat treatment step in a heat treating unit 228 after the first expansion step. Both figures clearly show that the stretch rod 208 remains in contact with the base portion of the intermediate article. It is also noted in Col. 10, lines 48-50, that to "faciliate uniform contraction of the first intermediate article 70, the centering rod 208 shortens by means of internal spring 209." This description, however, relates to the heat treatment step in the heat treating unit 228, but not in the first molding unit 214.

An essential feature of the method of manufacturing the biaxially-oriented polyester container of the present invention as recited in Claim 2 is that "in the step of blow molding a bottom part of said primary molded product, the primary orientation blow molding is performed with a bottom part of said preform released from a restrained state" as illustrated in Figures 5 and 6, and as described on page 11, line 17, through page 13, line 4, of the application as filed. This process step (A-3) is performed during the first blow molding step in the primary mold 13.

The comparable rod used in the current application is called a stretch rod (14) which was only used in conjunction with a press rod (15) to prepare containers where the bottom part of the primary molded product was blow molded in a state in which the bottom part of the preform was restrained by the stretch rod (Comparative Examples 1 and 2). In Examples 1 and 2 of the application, the bottom part of the primary molded product was blow molded in a state in which the bottom part of the preform was *not* restrained by the stretch rod. In the latter examples, the press rod (15) was released when the stretch rod was halfway down the mold so that the blow molded intermediate product does not contain a center portion in the bottom part of the preform that is in contact with the stretch rod or any portion of the restraining rod.

The method of the invention provides several benefits including uniform crystallinity in a radial direction extending outward from the center of the bottom part of the intermediate product. The thickness of the bottom part of the intermediate product may also be substantially equal in a radial direction depending on the shape of this section of the primary mold.

Collette et al. does not disclose or suggest (in the specification or Figures 5, 6, or 9-19) a method of making a polyester container using a process step (A-3) where *the preform is completely released from the contracting and restraining rods and in an unrestrained state in the primary mold*. The containers of Collette et al. also differ from those disclosed in the current application in at least one major aspect. The crystallinity of the base portion generally varies from the distance of its center point due to its manufacturing process in which a stretch rod and a press rod are in contact with the base during the formation of the intermediate container product. The containers of the instant invention generally have a base portion without a center plug area formed during the manufacturing process that has a different crystallinity than other regions of the base extending out radially from the diameter of the press rod used during first stages of the blow molding procedure.

Collette et al., therefore, does not disclose or suggest that the "primary orientation blow molding is performed with the bottom part of said preform released from a restrained state" as required by Claim 2 of the present application. For this reason, the X-ray diffraction measurements required by Claim 1 would *not* be inherent in the article made by the process of Collette et al. since it is made by a different method (See Examples 1 and 2, and comparative Examples 1 and 2 of the present application). For the foregoing reasons, Collette et al. cannot anticipate and does not render obvious the invention of Claims 1 and 2 of the present application. It is respectfully requested that the rejection of these claims under 35 U.S.C. § 102 be reconsidered and withdrawn.

Rejections Under the Judicially-Created Doctrine of Double Patenting

Claims 1 and 2 were rejected under the judicially-created doctrine of obvious-type double patenting as being unpatentable over Claim 3 of U.S. 6,627,279.

3. A method of manufacturing a polyester container, said method comprising the steps of blow-molding a preform made of polyester resin under biaxial orientation in a primary mold to obtain an intermediate molded piece having dimensions greater than a final molded product; heat-shrinking said intermediate molded piece; and blow-molding the heat-shrunk intermediate molded piece under biaxial orientation in a secondary mold and, at the same time, heat-setting a barrel portion and a bottom portion of said container in the secondary, thereby manufacturing a polyester container in which the polyester material of the bottom portion of said container exhibits a DSC endothermic peak in the range of about 150 °C. to the melting start point of the polyester material.

This claim is not directed to a method of manufacturing a polyester container in which, in the step of blow molding a bottom part of the primary molded product, the primary orientation blow molding is performed with the bottom part of the preform released from a restrained state, as required in Claim 2 of the present application, and this claim would not have been obvious over Claim 3 of U.S. Patent No. 6,627,279. In addition, for the reasons set forth above, the X-ray diffraction properties of the container of Claim 1 of the present application would not be inherent in or obvious over the properties of a container produced by the method of U.S. Patent

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No. 6,627,279. Accordingly, the Examiner's rejection of Claims 1 and 2 on the basis of obviousness-type double patenting over Claim 3 of U.S. Patent No. 6,627,279 is respectfully traversed, and reconsideration and withdrawal of this rejection is requested.

CONCLUSIONS

In view of the foregoing amendments and remarks, it is believed that Claims 1 and 2 are in condition for allowance. Entry of the foregoing amendments and favorable action are requested. Please contact the applicants' representative at the number set forth below to discuss any issues that will facilitate the prosecution of this application.

Respectfully submitted,

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